Title (en)

RHEOMETER STANDARDISATION

Title (de)

RHEOMETERSTANDARDISIERUNG

Title (fr)

STANDARDISATION D'UN RHÉOMÈTRE

Publication

EP 2638383 A1 20130918 (EN)

Application

EP 11791617 A 20111102

Priority

- GB 201019146 A 20101112
- GB 2011052135 W 20111102

Abstract (en)

[origin: WO2012063043A1] A rheometer, such as a melter-fed, gear pump test sample delivery, is standardised to a prescribed rheological measurement reference standard, such as, in conjunction with, or in relation to, MFI, variously by means of: ° a so-called 'Cluster Die', with one or more die orifices matched to a standard Melt Flow Index Die for equivalent rheological effect; ° an orifice matched to a standard Melt Flow Index Die to produce both a 'multiplier' pressure drop and equivalent overall rheological effect; ° individual regional conditioning adjustments or combined regional adjustments; ° a slow matching taper to conjoin two flow regions with minimal interference of flow pattern or pressure drop; ° thermometer placement in the body surrounds of a heated die to measure die melt temperature; ° calibration of a thermometer for die melt temperature by a combination of temporary and permanent placements of other thermometers in the die melt, in the die and at the heating element(s) of the die; ° a temperature stabilisation device for melt pressure transducers of rigid or flexible stem construction, of any type of pressure transducer; ° a polymer plant gear pump polymer melt drive adapted for rheometry using internal flow restriction as a rheometer die.

IPC 8 full level

G01N 11/08 (2006.01)

CPC (source: EP GB US)

G01N 11/08 (2013.01 - EP GB US); G01N 11/06 (2013.01 - EP US)

Citation (search report)

See references of WO 2012063043A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2012063043 A1 20120518; EP 2638383 A1 20130918; GB 201019146 D0 20101229; GB 201119519 D0 20111221; GB 201308383 D0 20130619; GB 2498493 A 20130717; GB 2498493 B 20171227; US 2013219983 A1 20130829

DOCDB simple family (application)

GB 2011052135 W 20111102; EP 11791617 A 20111102; GB 201019146 A 20101112; GB 201119519 A 20111111; GB 201308383 A 20111102; US 201113882618 A 20111102